

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ROBERT C. BOGART

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Appeal No. 1999-1483  
Application No. 08/732,887

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ON BRIEF

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Before CALVERT, ABRAMS, and JENNIFER D. BAHR, Administrative Patent Judges.  
ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-4, 6-11 and 13, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates to a foldable ladder having adjustable legs. An understanding of the invention can be derived from a reading of exemplary claim 1, which appears in the appendix to the appellant's Brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Burrows	419,821	Jan. 21, 1890
Busko	1,354,166	Sep. 28, 1920
Young	2,500,333	Mar. 14, 1950
Adamski et al. (Adamski)	4,029,223	Jun. 14, 1977
Kupfert	4,846,305	Jul. 11, 1989
High et al. (High)	5,590,739	Jan. 7, 1997
		(filed Nov. 1, 1994)

The following rejections stand under 35 U.S.C. § 103:

- (1) Claims 1-4, 6, 9 and 10 on the basis of Burrows and High.
- (2) Claim 7 on the basis of Burrows, High and Young.
- (3) Claim 8 on the basis of Burrows, High and Adamski.
- (4) Claim 11 on the basis of Burrows, High and Kupfert.
- (5) Claim 13 on the basis of Burrows, High and Busko.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the Answer (Paper No. 12) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 11)<sup>1</sup> and Reply Brief (Paper No. 13) for the appellant's arguments thereagainst.

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<sup>1</sup> An issue arose as to which of the two Briefs (Papers No. 11 and 17) should be considered. The examiner decided in favor of the Brief filed on December 31, 1998, and acted upon the claims as they were appended thereto (see Paper No.19).

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, the applied prior art references, the respective positions articulated by the appellant and the examiner, and the guidance provided by our reviewing court. As a consequence of our review, we make the determinations which follow.

As manifested in independent claim 1, the appellant's inventive ladder comprises a top step, two leg assemblies mounted to the top step and each having means for adjusting the length thereof and a foot, a step assembly mounted to the top step and having a plurality of steps and a foot, the step assembly foot and the two leg assembly feet forming a tripod configuration,

means for pivoting the leg assemblies and the step assembly from a closed position in which the leg assemblies and the step assembly [are extended, sic] vertically downward from the top step to an angular position in which the leg assemblies and the step assembly are angularly displaced from vertical and oriented along radial axes positioned 120 degrees from one another in the tripod configuration (emphasis added), and

means for locking each leg assembly and the step assembly to an angular position along the radial axes positioned 120 degrees from one another (emphasis added).

The examiner is of the opinion that the subject matter recited in this claim is rendered obvious by the combined teachings of Burrows and High. A key finding in this rejection is that in the Burrows ladder the leg assemblies and step assembly "are angularly displaced

along radial axes positioned 120 degrees from one another” (Answer, page 5) because Burrows’ Figure 1 “depicts the angles between the step assembly foot and the two leg assembly feet as being nearly equally spaced which would correlate to the angles between . . . being 120 degrees” (Answer, page 10).

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1052 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

The examiner appears to have focused on the angular relationship between the feet of the step assembly and the leg assemblies of the Burrows ladder when the ladder is in its erected position. It is true that, as shown in Figure 1, the points at which the three units touch the ground appear to be equidistant from one another. However, this does not satisfy the terms of claim 1, which recites the invention not in terms of the relationship

between the feet of the assemblies at the points at which they contact the ground, but of the angles between the axes along which the three assemblies are displaced during their movement, which must be “along radial axes positioned 120 degrees from one another.”

There is no explanation in Burrows that specifies the relationship between the three assemblies in a manner that can directly be related to the language of claim 1, so we are left to analyzing the drawings to determine this. In the Burrows arrangement, the leg assemblies are attached together at a mid-point and thus displace outwardly in a scissor-like movement with both essentially in the same plane, which would place the axes along which they move at 180 degrees to each other. The step assembly moves outwardly along a radial axis that is at 90 degrees to the plane within which the leg assemblies move with respect to one another. While it is possible to position the three assemblies of the Burrows ladder so that the feet touch the ground at points equidistant from one another, it is clear to us that the angular relationship of the axes of movement of these assemblies in accomplishing this is not 120 degrees, as required by claim 1. Consideration of the teachings of High, which was cited for its teaching of providing a ladder with adjustable legs, does not cure this deficiency.

This being the case, the combined teachings of the two applied references fail to establish a prima facie case of obviousness with regard to the subject matter recited in claim 1. We therefore will not sustain the rejection of claim 1 or, it follows, of claims 2-4, 6, 9 and 10, which depend therefrom and stand rejected on the same grounds.

Further consideration of Young, Adamski, Kupfert and Busko, which individually were added in the rejections against the remaining dependent claims, does not provide teachings which will cure the defect in the combination of Burrows and High. The four rejections that encompass dependent claims 7, 8, 11 and 13 are not sustained.

Another shortcoming in the examiner's rejection of claim 1 that is worthy of mention is that claim 1 sets forth the means for pivoting the step assembly and the leg assemblies in means-plus-function format, which must be evaluated in the context of the sixth paragraph of 35 U.S.C. § 112. In order to meet a means-plus-function limitation, the prior art must perform the identical function recited in the means limitation, and perform that function using the structure disclosed in the appellant's specification or an equivalent structure. See Valmont Indus. Inc. v. Reinke Mfg. Co., 983 F.2d 1039, 1042, 25 USPQ2d 1451, 1454 (Fed. Cir 1993). As to the first requirement, even if one were to consider that the Burrows system accomplishes the same function as the claimed system, it does not do it using the same structure disclosed in the appellant's specification. In this regard, the appellant's means for pivoting the three assemblies comprises three pairs of spaced flanges (22) which are fixedly mounted to the underside of the top step (16) in such a fashion that the pivotally mounted assemblies mounted thereon will be displaced along axes that are oriented 120 degrees to one another. However, in the Burrows ladder, each of the leg assemblies is mounted on flanges attached to the sides of the legs (12) of the ladder assembly through pivotally attached intermediate links (29), and the flanges are

oriented at 180 degrees to each other. Clearly, this is not the same structure as that disclosed by the appellant.

While there is no litmus test for an “equivalent” that can be applied with absolute certainty and predictability, there are several indicia that are sufficient to support a conclusion of equivalency or non-equivalency. These include:

(1) Whether the prior art elements perform the function specified in the claim in substantially the same way, and produce substantially the same results as the corresponding structure disclosed in the specification. Odetics Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1267, 51 USPQ2d 1225, 1229-30 (Fed. Cir. 1999).

(2) Whether a person of ordinary skill in the art would have recognized the interchangeability of the elements shown in the prior art for the corresponding elements disclosed in the specification. Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999).

(3) Whether the prior art elements are the structural equivalents of the corresponding elements disclosed in the specification. In re Bond, 910 F.2d 831, 833, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990).

(4) Whether there are insubstantial differences between the prior art elements and the corresponding elements disclosed in the specification. IMS Technology, Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1436, 54 USPQ2d 1129, 1138-39 (Fed. Cir. 2000).

As a result of our review, we have determined that there is nothing in the record which would support answering any of the above questions in the affirmative. This being the case, we conclude that the prior art structure does not qualify as being an equivalent under 35 U.S.C. § 112, sixth paragraph, of the structure disclosed by the appellant in the specification.

Since neither of the requirements set forth in Valmont has been met by Burrows, the applied prior art fails to establish a prima facie case of obviousness with regard to the subject matter recited in claim 1 on the basis of the sixth paragraph of 35 U.S.C. § 112, and the rejection of independent claim 1, and all of the dependent claims, also cannot be sustained on this ground.

CONCLUSION

None of the five rejections is sustained.

The decision of the examiner is reversed.

IAN A. CALVERT	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
NEAL E. ABRAMS	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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Appeal No. 1999-1483  
Application No. 08/732,887

Page 9